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EDNA I. GERGEL, Ph.D.

* NOT ADMITTED IN NJ
† SENIOR ATTORNEYS

August 16, 2001

Commissioner for Patents
Washington, DC 20231-0001

I hereby certify this correspondence is being deposited with the United States Postal Service as first class mail, postpaid in an envelope, addressed to: Commissioner for Patents, Washington, D.C. 20231

Date: August 16, 2001

Signature: Barbara Kemmler

Re: U.S. Utility Application No. 09/754,853

Filed: January 05, 2001

For: Nucleic Acid Molecules and Other Molecules Associated with Soybean Cyst Nematode Resistance

Inventors: Brian M. Hauge *et al.*

Atty. Docket: 1193-3 (04983.0216.NPUS01/38-21)

Sir:

Transmitted herewith for appropriate action by the U.S. Patent and Trademark Office (PTO) are the following documents:

1. Response to Notice to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures;
2. Statement regarding sequence submission;
3. A substitute sequence listing in computer readable form and two copies of the substitute sequence listing on CD-ROM;
4. A copy of the raw sequence listing error report;
5. Return Postcard.

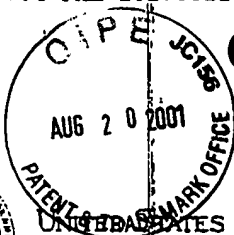
It is respectfully requested that the attached postcard be stamped with the date of filing of these documents and mailed to us.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 08-2461. A duplicate copy of this letter is enclosed.

Sincerely,

Linda T. Parker (Reg. No. 46,046)

LTP/bjk
Enclosures



Page 1 of 1

Kuckey
1193-0002

UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/754,853	01/05/2001	Brian M. Hauge	04983.0216.NPUS01/38-21 (1)

CONFIRMATION NO. 4137

22930
HOWREY SIMON ARNOLD & WHITE LLP
BOX 34
1299 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20004

FORMALITIES LETTER



OC00000006246832

Date Mailed: 07/02/2001

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS
CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE
DISCLOSURES

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (703) 308-4216
- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

A copy of this notice **MUST** be returned with the reply.

Customer Service Center
Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE

RECEIVED
DOCKET DEPT.
HOWREY SIMON ARNOLD & WHITE

JUL 05 2001

WASHINGTON, D.C.

#51
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Hauge et al.

Examiner: Unassigned

Serial No.: 09/754,853

Group Art Unit: Unassigned

Confirmation No: 4137

Filed: January 5, 2001

Docket: 1193-3
(04983.0216.NPUS01/38-21)

For: NUCLEIC ACID MOLECULES AND
OTHER MOLECULES ASSOCIATED
WITH SOYBEAN CYST NEMATODE
RESISTANCE

Dated: August 16, 2001

I hereby certify this correspondence is being deposited
with the United States Postal Service as first class mail,
postpaid in an envelope, addressed to: Commissioner
for Patents, Washington, D.C. 20231

Date: August 16, 2001

Signature Barbara Kemmleir

Commissioner for Patents
Washington, DC 20231

**RESPONSE TO NOTICE TO COMPLY WITH REQUIREMENTS FOR
PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE
AND/OR AMINO ACID SEQUENCE DISCLOSURE**

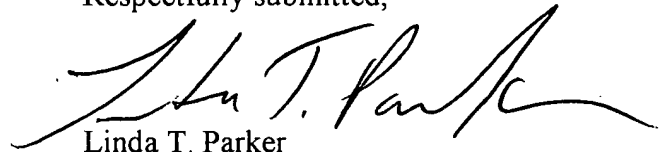
Sir:

The Notice to comply with requirements for patent applications containing
nucleotide sequence and/or amino acid sequence disclosures mailed July 2, 2001 stated
that the present application failed to comply with the requirements of 37 C.F.R. § 1.822-
and/or § 1.823.

Applicants herewith submit a corrected sequence listing computer readable form
(CRF) on CD-ROM, two copies of the sequence listing on CD-ROM identified as "Copy
1" and "Copy 2", and a statement under § 1.821(f) and § 1.821(g).

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency or credit any overpayment to our Deposit Account No. 08-2461.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Linda T. Parker".

Linda T. Parker
Reg. No: 46,046

Hoffmann and Baron, LLP
6900 Jericho Turnpike
Syosset, NY 11791
(973) 331-1700



#4
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Hauge et al.

Examiner: Unassigned

Serial No.: 09/754,853

Group Art Unit: Unassigned

Confirmation No: 4137

Filed: January 5, 2001

Docket: 1193-3
(04983.0216.NPUS01/38-21)

For: NUCLEIC ACID MOLECULES AND
OTHER MOLECULES ASSOCIATED
WITH SOYBEAN CYST NEMATODE
RESISTANCE

Dated: August 16, 2001

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United States Postal Service as first class mail, postpaid in an
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20231

Date: August 16, 2001

Signature: Barbara Kemmlein

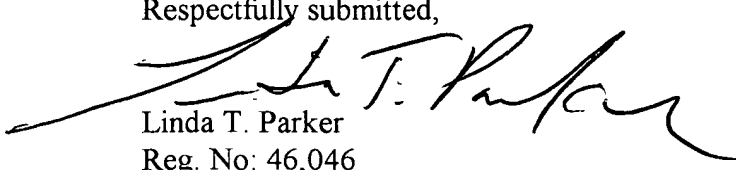
Commissioner for Patents
Washington DC 20231

STATEMENT REGARDING SEQUENCE SUBMISSION

Sir:

In accordance with 37 C.F.R. § 1.821(f) and § 1.821(g), the substitute computer readable form of the sequence listing and the substitute computer readable copy submitted herewith in the above mentioned application are the same. The substitute computer readable copy contains no new matter.

Respectfully submitted,


Linda T. Parker

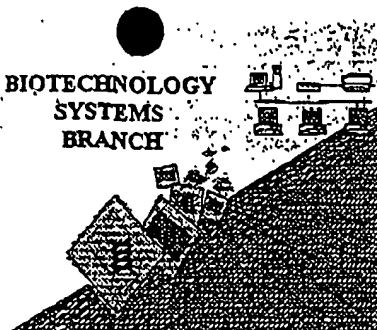
Reg. No: 46,046

Hoffmann and Baron, LLP
6900 Jericho Turnpike
Syosset, NY 11791
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RAW SEQUENCE LISTING ERROR REPORT

BIOTECHNOLOGY
SYSTEMS
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/754,853

Source: OIPE

Date Processed by STIC: 1/23/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY.

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).

Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/754,853

DATE: 01/23/2001

TIME: 15:39:47

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Does Not Comply
Corrected Diskette Needed

sup. 5, too

1 <110> APPLICANT: Parnell, Laurence D.

2 Hauge, Brian M.

3 Parsons, Jeremy D.

4 Wang, Ming Li

6 <120> TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules

Associated With

7 Soybean Cyst Nematode Resistance

9 <130> FILE REFERENCE: 38-10(15910)B

OK 11 <140> CURRENT APPLICATION NUMBER: US/09/754,853

11 <141> CURRENT FILING DATE: 2001-01-05

11 <150> PRIOR APPLICATION NUMBER: US 60/174,880

13 <151> PRIOR FILING DATE: 2000-01-07

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The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors...

1/23/01

RAW SEQUENCE LISTING

DATE: 01/23/2001

PATENT APPLICATION: US/09/754,853

TIME: 15:39:47

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RAW SEQUENCE LISTING

DATE: 01/23/2001

PATENT APPLICATION: US/09/754,853

TIME: 15:39:47

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228	tcataatcac	gtccactcgg	tcatatgtca	tigaaagtga	taacgttaaa	ataaaatatt	6120
230	cgtgcaaaag	tgtgatgacg	taacattttt	fatgtcacat	tatcatttcc	ctaaagacaa	6180
232	ctaaccacaa	ataataaaat	aaaattgaat	tttttttaaa	atacttaact	ttaaacaaata	6240
234	aatitttaaat	ataaatctaa	aatgatctg	tatgtccatt	atcaaaaatt	taagtaagcc	6300
236	gaattataac	cttctttatt	agtcattgtg	gattcgctaa	caactcgtgc	tgatcgagcc	6360
238	tatagtaatt	agctctctta	gttagaaaca	ttagcccttg	allalcaata	tgatgtttct	6420
240	gcacaaaaag	acaaaatgat	ttcatgattl	ttagatgaat	aagcgcagga	ttctctattt	6480
242	ttcagagcax	ttaaatgaac	gcaattacga	ggcagcaaat	gcadaaatgct	tcacatgagc	6540
244	ctatttgcta	ttttaaattll	cactttgaca	tttttataat	taattttgtc	tcaataattc	6600
246	gcattgacaa	tagcattaaa	ggttagctaa	aactctaatt	taaattgtta	catattttta	6660
248	aaaaaaactg	agaaaacatga	tttaagtttt	gttatttatat	caaalactac	tataaaatag	6720
250	aaaaazctza	caaccttcaa	atgtactaga	ttcggatttt	ttttatagaa	aatatttttaa	6780
252	aattaaatgc	calactcaac	agtcaacacg	gtatttcaca	gtcccttaga	atttcaacaa	6840
254	aatcaaacca	agtaacataa	attagttgac	tgaaaaaatg	aattaaatta	aaaggcagtc	6900
256	atggatatac	accaggcata	ttaatttaca	taacctcacc	cgagcaaaag	cggttttaac	6960
258	agataatggt	ccagtacgtg	ttaggaalct	aacutgctgg	caatgtcaaa	aaaataacag	7020
260	caltgatggt	tgtatgatct	aaaatactta	caaagctagg	aggaggacaa	aatggataca	7080
262	tatttgatg	tacatgtaat	aactctatct	agacaggcta	gttgagatac	ataagaataa	7140
264	gaacgtgtct	gtctcagtaa	agggcagaca	caagtagaag	tagaagaaac	aaatagcagt	7200
266	gccaatgtac	coggcacgal	gaaatcatcc	gagatggagc	agccgaaggt	ttgtggggag	7260
268	ctcttccagc	aacagctgga	gcaactgcct	gcccglcgt	tcctlgttgc	tcactgttag	7320
270	gcaatggggt	tgatgaagtc	tcatttgag	aaaggggcat	cctcttgcc	agactcagat	7380
272	cctgacctac	agatgcattg	agactgtata	taagcaaaag	gaataaaaag	ggagacggga	7440
274	agaacagtgc	taaggtagaa	aaaagccttt	gcalcaagca	ccaggcaaat	ggttaagaga	7500
276	ccaagaactc	acaagaagtc	agcttcattg	cctaagtaga	atgattagaa	ctaaagctaa	7560
278	aatatattag	cttataaaact	caaagtacta	tgactcacia	tttgagcgtg	accacgctag	7620

RAW SEQUENCE LISTING

DATE: 01/23/2001

PATENT APPLICATION: US/09/754,853

TIME: 15:39:48

Input Set : D:\pa_00330.txt

Output Set: N:\CRF3\01232001\I754853.raw

280	cttcttgttt	ccctatcaa	ataccaaucg	gtatcctgtc	atgaagttcl	ctgccaaaaa	7680
282	aatttallag	tttaagatc	aaagtatctt	ttaatcccat	attccagagt	atgggtaate	7740
284	agtagacttc	gataaggaaa	atatttaact	tacgtccgat	tgttcccata	tctccttcag	7800
286	ttggctglat	ggclaaacaa	aatccaatga	ctcctgtcac	aggaaggacc	gatctaacta	7860
288	atttagctac	aagccgacaa	ctattcttat	atgaagttct	cttgraacat	ctttaattat	7920
290	algtcaaaat	tttagtccag	gatcaattaa	ttcacaccca	actcattgcc	atagattaca	7980
292	aatacggggt	catagaccac	aaauctgttt	ttctglllgu	acgttagagt	taagctggga	8040
294	acclttggca	actcttgcga	actgtctcag	aaaagaataa	taaataaata	aagccatcaa	8100
296	agagaccaga	aaattctacc	aattaggama	tcatgcacca	ucgcuagagg	gaagagagac	8160
298	agagatctat	ccagaaaact	caactgggaa	cataacaata	ctcccaagga	gatccttcaa	8220
300	agctagatct	agaaccattt	acttgtttga	ctaactatca	caaataaaat	catattaaaa	8280
302	gactgagcag	aaatttacct	taatggauit	tayaaaacta	uagtacctcc	tcagctattg	8340
304	ctccatacac	atgaccagga	agaaaagttaa	atgatgtccc	gotatcaacc	tycaclttaa	8400
306	aacttctcat	tttaagacaa	gaattcccaa	cacacatgta	ctccactcca	ataatgtagg	8460
308	ctgaactgac	caggaaattt	ctcttaatta	gcactgtgac	accatcttct	aaagtctatt	8520
310	ttagtycagt	gaaacattgt	aaactaattt	aaagtacaga	atttcatact	ataatccatc	8580
312	aaaaggcaag	antgaagtay	acigtctgat	ggttggtccc	tgggtcccaa	aaantattct	8640
314	accagatcca	tcttcattaa	agcacaagga	aaagaattcg	tgatttaate	ctgatttagc	8700
316	aagaaaactt	ggaactgaac	tctcccccag	ccccaaactt	aataggccat	ctggagcaac	8760
318	cccatccaaa	taaccaccac	tttgtctcat	accacacctg	cattcaacea	aactgacgtc	8820
320	agagaaaaaa	ccaggaaact	tttttttaat	taaaaaaga	atacatcacc	agggaaagtg	8880
322	atgttgaaat	aacaaagaca	gggagtgtag	ccacacccaa	gaacuaattg	agcctgaaca	8940
324	gatgagtlly	alaaactlga	gcctgactga	agatgcagla	lgloctcaac	caacaatcca	9000
326	gaactcgacg	tggtctccga	caagttaact	accatgtatg	gacactgctg	ctgtgaactt	9060
328	ttacaattcg	hacccttctc	acacuaactga	tgactgcaag	atagatgctt	actggataag	9120
330	gaccgagacg	gactatactc	attcagatct	ctatcctgcu	taatagatgc	cccatatgtg	9180
332	uaggagcacc	tgccaatcaa	ttactggaaa	taagtgetaa	acctgrrata	gattctaaac	9240
334	ctcattgaac	cattacactc	agagagguaa	catgtttttg	gttagtgtca	cattaaactc	9300
336	gaattgaaac	cttatccaat	caaggatttt	caattcgcac	gattaaactat	ttgttaaca	9360
338	atcaataaaa	caagctaata	taatccgata	ttttattatt	tttattacat	ttaagatatt	9420
340	gagactacaa	gttacatagt	agagttaaacc	aacatttttag	ttcctgaag	tataaagcct	9480
342	gttcacataa	acattagtcc	ccaaactcaa	gaacttcaa	aaaagtccct	gaagctgcaa	9540
344	tccgccaaatc	gcattaatcc	aaagtataaa	aaaaatatgt	gacttaatga	taataattatc	9600
346	ntatgttttaa	gaguccaaaa	ttlcaagatg	aaacaactag	aaactccctg	gactaatttt	9660
348	aaattttctc	tagtttgaag	aaactaatg	acacccctgt	atgtttaate	atagtttact	9720
350	ctacatagta	agagaaatca	agaaaaaaa	tagatttagt	atgataattca	taccagattg	9780
352	gaatagtaac	tgcattgaca	tggagacac	tgtacgcaat	caacagggaat	ccaaaggaga	9840
354	tcactccctg	cgtrcaacgc	cacagagaaac	gaagtgtctg	gtgttcctat	atcaatccac	9900
356	gtgtaatgca	acctaatac	cagagaogca	ttatcagatt	caaacogaa	aaaaggagac	9960
358	aattagggat	tattattatl	attattatna	ttattaccag	ccgaagtctg	tgccgagcga	10020
360	catcgttttg	ctaccgtgag	aagguaacag	tagctggtag	cgtgcgcctc	cgactttgat	10080
362	cttgcgcggg	agaatgtcgc	cggtgagaa	catccgtag	tagcccatgc	tccaccggtc	10140
364	cggccagtat	cgggtcggag	gccgaacogg	tttcaattcg	tggcggaagc	ggtgaacgag	10200
366	gcgggcggaa	aacgtgatcg	gaaccggcat	tgcgcgagcc	gttaccaaaa	gcaacaaaag	10260
368	cagcaaccgc	caccgcacgc	agatcgagat	ctggcaactg	caactatctc	gatgcctcgt	10320
370	tttaactgat	tttaagtaacg	attagtgtta	attagttagg	tgagggtgag	cagtgtgcac	10380
372	catcatcgcc	atggatcgta	tgcgttcgtc	cctgtgtggc	tgtgtgtgag	tgagagttag	10440
374	agtgaagtg	aggggtggata	aaacaaaaca	acaaaactag	cgcattttgt	tcggggtgga	10500
376	attagactgt	tactaagtgc	ttaattaatg	gggaaaggaa	agtggtatga	ttagtgtttg	10560

RAW SEQUENCE LISTING

DATE: 01/23/2001

PATENT APPLICATION: US/09/754,853

TIME: 15:39:48

Input Set : D:\pa_00330.txt

Output Set: N:\CRF3\01232001\I754853.raw

```
378 taacuglaag cyattattgt aatgatgat taggaggaal aagggtgcaa cactgcagcy 10620
380 acgaagcqua acgtcgcgcg cgggtggccc accatgtctt tacgtgcttg agaalgaaac 10680
382 ggccttttgc tgcgcggtgc gattttgtct tgcacclgcy gcccgcgcgc cttttattat 10740
384 ttttccllcc cllllacgaa ataaaaata aaaaatcaaa caaaacaggc uaaaggttcc 10800
386 ttaagtattt agtttcatta tataaataaa ataatgcct agatctagta aataatcaca 10860
388 ttatglgglg tgggtcagga ataaagcttc acacacgaaa aaagaaatct tgcgaagtaa 10920
390 cagcgaagca cattaattgt llllaagaa atctaaagtl altgaagaaa caaactgaga 10980
392 calgalaaal tgaclaatta atacttttag tgaaggagac gtattttaaa agalaaagta 11040
394 laattatcat aataattaat aaaaataata acgattaata tttagtaut tcatctcttg 11100
396 taatatttct atgalclcaa ctcaactgat aattttcaag ataattagta taaltgcact 11160
398 ctglggatcc ttaagttctt tctcaaaaga aaaaaaaa calttttct tccccttgct 11220
400 ctgttctctt cttctgcct ctccaattct gttcacactc gtaggtgtgt cggccaatga 11280
402 tgtttatga taaagatcaa alacglttgc aatgaalccg galyacaaay clgagacaac 11340
404 caatagtga agctaacca tgcacaagt ctccaatcaa taaaacaggt ccaaaauggt 11400
406 ggggtggtcc aaatgtgaa ggtlaagtta agtaggtgt tcaagccttg gatttgctct 11460
408 ggttaaatcc gtccacccat ccaaacaaaa alalclggat ggatllgtgt gttttctctt 11520
410 ttaaatccgc clcatctgt catgaatgan tttgatcgag atggatttgt tattaauaaa 11580
412 agttcaaaaa laattttctt aattttttt aatatatttt taqaattlac aatacaatta 11640
414 ctgttaatat agltgcata aaaaaattaa caaccaattt caatgcacat attaaactga 11700
416 tcttaaatc aaattgaaau caagtaccca accaaacttt aattataaa gcaataata 11760
418 ctatclcaa lttcaacct aaagcagata acaaatgtct ttgaaaactt agtautctta 11820
420 taaggtacac actagtacaa aatauaactt aualcalccc aaandaata taatactaca 11880
422 alagaacac cgaattatag tgataatgtc agacaattgc tcaaccagac aacctcacac 11940
424 alagaacac ggttagcaaa agatcaaaat caattatrat acataataa aatttaaat 12000
426 atgctatgca gaaaaaagaa atatgccaaa aaagaaatca lalcataaac laagttaaaa 12060
428 ctattacclt aagaactaat agtctc ct cccaatacta atactcctaa gaatagtcca 12120
430 agtaataat ctaaacactaa cartatttaa agtcaaaaca tacaacttta aaaaatgttt 12180
432 taanaagttc atcataacat aatatcaatt tatattcata tgladucaa accgaaaaaa 12240
434 aaaaagaaac taltattgaa tactaglttc catctttttt gttlcatcta atlcaactcg 12300
436 taaatgcgc gacclttgct tattagtttt gagtcaattt tgggtacaaa tcaagcttc 12360
438 aacagtaaty ggaactaaag aactacaaaa atggatcaag caclcaacct lllgtactaa 12420
440 atgcagactc aaatgacaca atagacataa gaatgaccaa tatatctct gcatgaaa 12480
442 aaataacatg atatttggat gttlcatct tccaccatgc caaatgtca aatccaagac 12540
444 cgtcatcttc attgtcaatc tttaaatata tatccaactc actcctttgc tattccacac 12600
446 attttttatc atttttoaat ctlaattggt cgtcccaatc ctcatcctca tcaacatcgt 12660
448 tggcattacc ttgtgaagca tggatynag ccaagttact agauttacta ctatcaatgg 12720
450 aaataggalg tctgaagca tattcaacaa acatttttt tatagatca tccaattttt 12780
452 tcaagccttc ttgtgtttg tcaacacct gcattttctt aaaaacaaac tcaatataat 12840
454 caaatctata acacagatca agaaaagcag tcacaaataa aagatagcta atctgacac 12900
456 lctctcaata cttgtlaaac ttgagttgta ttttagttgt ctcttttgta tcacgggac 12960
458 atctcatgct ctccatctat ttaggcattt ctgaatagta accaacttct taaagaaatt 13020
460 cttagctgta acatgtagt acccagaaa aaaaattgca lcatagaaa cttlcaaaaa 13080
462 actcacaaac acccgagcat gtttctaact ctctcttta ggacatctc cttcactatt 13140
464 tagaagaglg agcacatag cagcctcaac atactcataa cgattgaay cttgttcaaa 13200
466 ttttcagcaa catctaacat caaataagt gagtgaccca gaaaaaaa ttgcatcata 13260
468 gaaaactllc aaaaaactca caaacacag agcacgtttc taatccatct clttaggaca 13320
470 tctccttca ctatttagaa gagtgagcac atatgcagcc tcaacatact cataacgat 13380
472 gaaagcttgt tcaaattttc agcaactct aacatcaat aagtgaggt ccactgtgtt 13440
474 ggcacattaa gtgttagcat tgcctttgaa ttacactaa cgtcctccg acacctcttt 13500
```

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

FYI

VERIFICATION SUMMARY

DATE: 01/23/2001

PATENT APPLICATION: US/09/754,853

TIME: 15:39:49

Input Set : D:\pa_00330.txt

Output Set: N:\CRF3\01232001\I754853.raw

L:11 M:270 C: Current Application Number differs. Replaced Current Application No
L:11 M:271 C: Current Filing Date differs. Replaced Current Filing Date
L:5859 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 2
L:6021 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 2
L:17361 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 3
L:35814 M:341 W: (46) "n" or "Xaa" used. for SEQ ID#:4
L:35816 M:341 W: (46) "n" or "Xaa" used. for SEQ ID#:4
L:37292 M:341 W: (46) "n" or "Xaa" used. for SEQ ID#:4
L:37294 M:341 W: (46) "n" or "Xaa" used. for SEQ ID#:4
L:37656 M:341 W: (46) "n" or "Xaa" used. for SEQ ID#:4
L:37658 M:341 W: (46) "n" or "Xaa" used. for SEQ ID#:4
L:37660 M:341 W: (46) "n" or "Xaa" used. for SEQ ID#:4
L:37662 M:341 W: (46) "n" or "Xaa" used. for SEQ ID#:4
L:37668 M:341 W: (46) "n" or "Xaa" used. for SEQ ID#:4
L:44619 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 8
L:44780 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 8
L:45076 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 9
L:45382 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 10
L:45680 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 11
L:45985 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 12
L:46281 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 13
L:46427 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 14
L:46589 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 14
L:46883 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 15
L:47031 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 16
L:47193 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 16
L:47489 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 17
L:47795 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 18
L:48095 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 19
L:48398 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 20
L:48698 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 21
L:49001 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 22
L:49301 M:361 W: Invalid Split Codon. Sequence data for SEQ ID#: 23